

CLAIMS

1. A method of rendering a multimedia signal (401;409), the multimedia signal comprising:
  - 5 events (407) of a first type arranged to carry content in the form of instructions to a rendering unit; and an event (406) of a second type arranged to carry additional content (410), wherein said additional content comprises an address identifying an encoded sample of multimedia content;
  - 10 wherein the method comprises the following steps: generating a multimedia output in response to the events of the first type; parsing (602) the multimedia signal (401;409) to identify said event (406) of the second type and to read the additional content (410); loading (607) the encoded sample of multimedia content (402) identified by said address;
  - 15 decoding (611) the encoded sample to provide a decoded sample for playback of the multimedia content; and superimposing (609) the decoded sample on the generated multimedia output in accordance with timing information associated to the event of the second type.
2. A method according to claim 1, wherein the timing information comprises a delta time value defining a time relative to a reference time.
- 25 3. A method according to claim 1 or 2, wherein the event of the second type includes a textual information of one or more predetermined commands, the one or more commands identifying an encoded sample.
- 30 4. A method according to any of claims 1 to 3, wherein superimposing comprises synchronising the decoded sample with the multimedia output based on the timing information.

5. A method according to any of claims 1 to 4, wherein the multimedia signal and the encoded sample are comprised in a container data item.
- 5 6. A method according to any of claims 1 to 5, wherein the event (406) of the second type comprises a System Exclusives event as defined in the specification of the Musical Instrument Digital Interface (MIDI).
- 10 7. A method according to any of claims 1 to 6, wherein the event (406) of the second type comprises a Meta-event as defined in the specification of the Musical Instrument Digital Interface (MIDI).
- 15 8. A method according to claim 7, wherein the event (406) of the second type comprises a Meta-event of the type cue-points, identified by the hexadecimal value FF 07.
9. A method according to claim 7, wherein the event (406) of the second type comprises a Meta-event of the type lyric, identified by the hexadecimal value FF 05.
- 20 10. A method according to claim 7, wherein the event (406) of the second type comprises a Meta-event of the type text, identified by the hexadecimal value FF 01.
- 25 11. A method according to any of claims 1 to 10, wherein an address indicates a position in a first file (402; 303) associated with the multimedia signal.
- 30 12. A method according to any of claims 1 to 11, wherein the multimedia signal is stored in a second file (302).

13. A method according to any of claims 1 to 12, wherein the additional content comprises an indication of the type of the coding scheme used for encoding the encoded samples.
- 5    14. A method according to any of claims 1 to 13, wherein the multimedia signal complies with the general Musical Instrument Digital Interface (MIDI) specification.
- 10    15. A unit for rendering a multimedia signal (401;409), the multimedia signal comprising:  
events (407) of a first type which are arranged to carry content in the form of instructions to the unit; and  
an event (406) of a second type arranged to carry additional content, wherein said additional content comprises an address identifying an encoded sample of multimedia content;  
wherein the unit comprises:  
a playback unit (202) adapted to generate a multimedia output in response to the events of the first type;  
a parser (201) arranged to identify the event (406) of the second type and to read the additional content (410);  
an interface (204) arranged to load the encoded sample of multimedia content identified by said address, and to cause a decoder to decode the decoded sample for subsequent playback of the multimedia content;  
a synchronising unit (210) adapted to synchronise playback of the decoded sample with the generation of the multimedia output.
16. A unit according to claim 1, wherein the multimedia signal complies with the general Musical Instrument Digital Interface (MIDI) specification.
- 30    17. A unit according to claim 15 or 16, wherein the timing information comprises a delta time value defining a time relative to a reference time.

18. A unit according to any one of claims 15 to 17, wherein the event of the second type includes a textual information of one or more predetermined commands, the one or more commands identifying an encoded sample.
- 5     19. A unit according to any of claims 15 to 18, wherein the multimedia signal and the encoded sample are comprised in a container data item.
- 10    20. A unit according to any of claims 15 to 19, wherein the event (406) of the second type comprises a System Exclusives event as defined in the specification of the Musical Instrument Digital Interface (MIDI).
- 15    21. A unit according to any of claims 15 to 19, wherein the event (406) of the second type comprises a Meta-event as defined in the specification of the Musical Instrument Digital Interface (MIDI).
- 20    22. A unit according to claim 21, wherein the event (406) of the second type comprises a Meta-event of the type cue-points, identified by the hexadecimal value FF 07.
- 25    23. A unit according to claim 21, wherein the event (406) of the second type comprises a Meta-event of the type lyric, identified by the hexadecimal value FF 05.
24. A unit according to claim 21, wherein the event (406) of the second type comprises a Meta-event of the type text, identified by the hexadecimal value FF 01.
- 30    25. A unit according to any of claims 15 to 24, wherein an address indicates a position in a first file (402; 303) associated with the multimedia signal.

26. A unit according to any of claims 15 to 25, wherein the multimedia signal is stored in a second file (302).

27. A unit according to any of claims 15 to 26, wherein the additional content  
5 comprises an indication of the type of the coding scheme used for encoding  
the encoded samples.

28. A computer program product comprising program code means adapted to  
perform the method according to any one of claims 1 through 14, when said  
10 program code means are executed on a data processing device.